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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,857	12/21/2001	James Jeannette	088305-0142	5707

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FOLEY AND LARDNER LLP  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER
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STEVENS, ROBERT

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

10/023,857

Applicant(s)

JEANNETTE ET AL.

Examiner

Robert Stevens

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 10-14, 19-25, 27, 28, 33-39, 44-49, 51-58, 60-64 and 66-72 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 10-14, 19-25, 27, 28, 33-39, 44-49, 51-58, 60-64 and 66-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is responsive to communications: appeal brief filed 3/3/2006.
2. The Office withdraws the previous rejections of the claims under 35 USC §§102(e) and 103(a).
3. New rejections of the claims under 35 USC §§101, 112-2<sup>nd</sup> paragraph and 103(a) are set forth below.
4. This action is **NON-FINAL**.
5. Claims 1-5, 10-14, 19-25, 27-28, 33-39, 44-49, 51-58, 60-64 and 66-72 are pending. Claim 1, 13, 27, 39, 49, 58 and 64 are independent. Claims 6-9, 15-18, 26, 29-32, 40-43, 50, 59, 65 and 73 have been cancelled.

### ***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
7. **Claims 58-63 are rejected under 35 U.S.C. 101** because the claimed invention is directed to non-statutory subject matter.

**Regarding independent claim 58:** This claim encompasses software per se. As such, the claim is not tangibly embodied, and therefore does not accomplish a useful, concrete and tangible result. The Office notes that the mere recital of the term "system" does not import a hardware embodiment into the claims, which read upon a "software system".

**Claims 60-63** depend upon claim 58, and do not correct the deficiencies of independent claim 58. These claims are therefore likewise rejected.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. **Claims 58-63 are rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Independent claim 58 (line 9)** recites the limitation "the receiver". There is insufficient antecedent basis for this limitation in the claim.

**Claims 60-63** depend upon claim 58, and are therefore likewise rejected.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 1-5, 10-14, 19-25, 27-28, 33-39, 44-49, 51-58, 60-64 and 66-72 are rejected under 35 U.S.C. 103(a)** as being unpatentable Shroeder et al (US Patent Application Publication No. 2002/0099735, filed Jan. 19, 2001 and published Jul. 25, 2002, hereafter referred to as "Shroeder") in view of Vedula et al (US Patent No. 6,823,495, filed Sep. 14, 2000 and issued Nov. 23, 2004, hereafter referred to as "Vedula").

**Independent claim 1 states:**

*A computer implemented method of automatically generating Electronic Data Interchange (EDI) documents by a trading partner comprising the steps of:*  
*receiving, by the trading partner, a standard data model comprising EDI related data for a plurality of transactions;*  
*generating data definitions for a self-describing markup language corresponding to each transaction of the EDI related data;*  
*generating self-describing markup language data using a data definition from the generated data definitions for the self-describing markup language corresponding to an EDI transaction and corresponding application data related to EDI; and*

*automatically generating, by the trading partner, an EDI document based on the self-describing markup language data, wherein the step of generating data definitions further comprises, for each transaction, generating definitions for the self-describing markup language, a separate data model to read in data, a separate data model to read out data, and a map component file.*

Shroeder discloses in [0022] the transferring of data between electronic businesses (i.e., trading partners) and the processing of EDI transaction records in [0032], discussing the initial exclusion of certain transaction information, which is reinserted/updated in the XML (i.e., self-describing markup language) file. Shroeder further discloses the mapping of inbound (i.e., received) EDI data and subsequent normalization of that data in paragraphs [0051] – [0052]. Shroeder also discloses the automatic generation of a markup language data in a target EDI format from reception of a source EDI format document in Fig. 1B, depicting the directory (#24) for storing a source EDI document and the processing blocks (#28 - #34) employed to translate the source into the target EDI and store in an output directory (#36 OutEDI).

However, Shroeder does not explicitly disclose the use of source and target models. Vedula, though, discloses the use of source and target models in col. 3 lines 8-12, discussing the use of source and target models (i.e., schemas) for source and target XML business documents. Vedula further discusses the practice of each company or trading partner creating a document model or XML schema and mapping information transfer between those models in col. 2 lines 25-35.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Vedula for the benefit of Shroeder, because to do so

enabled a user to graphically represent a source document to target document mapping, as taught by Vedula in the Abstract. These references were all applicable to the same field of endeavor, i.e., translation of electronic business documents.

**Regarding dependent claim 2:** Shroeder discloses the user selection of a list of standard EDI formats in [0039] – [0040], discussing the real time translation of XML documents into the format selected by the recipient trading partner. Shroeder further discusses transaction sets, such as purchase orders, in [0051]. (Refer to Applicant's specification at [0079] or PGPUB No. 20030121001 at [0121]). It is implied that entry of parameters must occur at some point in order for the translation process to take place. Whether such entry is manual or automatic was merely an obvious variant to one skilled in the art at the time of the invention.

**Claims 3-5** are substantially similar to claim 2, and therefore likewise rejected.

**Regarding dependent claims 10-12:** Shroeder discloses the well-known use of XML in [0069] – [0072], discussing translation to XML. Shroeder further discloses the well-known use of ANSI X12 and UN Edifact in [0092].

**Independent claim 13** is directed to a system for implementing the method of claim 1. As such, claim 13 is substantially similar to claim 1, and therefore similarly rejected.

**Regarding dependent claim 14:** Shroeder does not explicitly disclose the use of a DTD document model. Vedula, though, discloses the well-known use of schemas to model documents in the Abstract, which notes that other information sources may be used to represent source and target documents. It was merely an obvious variant to one skilled in the art at the time of the invention to have employed a DTD model vice a schema model.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Vedula for the benefit of Shroeder, because to do so enabled a user to graphically represent a source document to target document mapping, as taught by Vedula in the Abstract. These references were all applicable to the same field of endeavor, i.e., translation of electronic business documents.

**Claim 19** is substantially similar to claim 2, and therefore likewise rejected.

**Claims 20-22** are substantially similar to claim 19, and therefore likewise rejected.



**Claims 23-25** are substantially similar to claims 10-12, respectively, and therefore likewise rejected.

**Independent claim 27** is directed to a computer program product for code configured to cause a computer to perform the method steps of claim 1. As such, claim 27 is substantially similar to claim 1, and therefore similarly rejected.

**Claim 28** is substantially similar to claim 14, and therefore likewise rejected.

**Claim 33** is substantially similar to claim 2, and therefore likewise rejected.

**Claims 34-35** are substantially similar to claim 33, and therefore likewise rejected.

**Claims 36-38** are substantially similar to claims 10-12, respectively, and therefore likewise rejected.

**Independent claim 39 states:**

*A computer implemented method of automatically generating Electronic Data Interchange (EDI) documents, by a trading partner, comprising the steps of:*  
*receiving, by the trading partner, a standard data model containing EDI related data;*  
*receiving a manual entry of parameters related to an EDI document format;*

*generating from the standard data model and the manual entry of parameters, by the trading partner, data definitions for the self-describing markup language corresponding to each transaction of the EDI related data and the received manually entered parameters; and*  
*generating self-describing markup language data using the data definition for the self-describing markup language corresponding to an EDI transaction and corresponding application data related to EDI; and*  
*automatically generating, by the trading partner, an EDI document based on the self-describing markup language data,*  
*wherein the step of generating data definitions further comprises, for each transaction, generating definitions for the self-describing markup language, a separate data model to read in data, a separate data model to read out data, and a map component file.*

Shroeder discloses in [0022] the transferring of data between electronic businesses (i.e., trading partners) and the processing of EDI transaction records in [0032], discussing the initial exclusion of certain transaction information, which is reinserted/updated in the XML (i.e., self-describing markup language) file. Shroeder discloses the selection of EDI formats in [0039] – [0040], disclosing the selection from a list of defined formats by the recipient trading partner and subsequent real-time format translation. Shroeder further discloses the mapping of inbound (i.e., received) EDI data and subsequent normalization of that data in paragraphs [0051] – [0052]. Shroeder also discloses the automatic generation of a markup language data in a target EDI format from reception of a source EDI format document in Fig. 1B, depicting the directory (#24) for storing a source EDI document and the processing blocks (#28 - #34) employed to translate the source into the target EDI and store in an output directory (#36 OutEDI).

However, Shroeder does not explicitly disclose the use of source and target models. Vedula, though, discloses the use of source and target models in col. 3 lines 8-

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12, discussing the use of source and target models (i.e., schemas) for source and target XML business documents. Vedula further discusses the practice of each company or trading partner creating a document model or XML schema and mapping information transfer between those models in col. 2 lines 25-35.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Vedula for the benefit of Shroeder, because to do so enabled a user to graphically represent a source document to target document mapping, as taught by Vedula in the Abstract. These references were all applicable to the same field of endeavor, i.e., translation of electronic business documents.

**Regarding dependent claim 44:** Shroeder discloses the user selection of a list of standard EDI formats in [0039] – [0040], discussing the real time translation of XML documents into the format selected by the recipient trading partner. Shroeder further discusses transaction sets, such as purchase orders, in [0051]. (Refer to Applicant's specification at [0079] or PGPUB No. 20030121001 at [0121]). It is implied that entry of parameters must occur at some point in order for the translation process to take place. Whether such entry is manual or automatic was merely an obvious variant to one skilled in the art at the time of the invention.

However, Shroeder does not explicitly disclose the use of source and target models. Vedula, though, discloses the use of source and target models in col. 3 lines 8-12, discussing the use of source and target models (i.e., schemas) for source and target XML business documents. Vedula further discusses the practice of each company or

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trading partner creating a document model or XML schema and mapping information transfer between those models in col. 2 lines 25-35. It is noted that the use of source and target connotes a directional aspect to the transformation process. Therefore it was implied that the direction of transformation was specified.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Vedula for the benefit of Shroeder, because to do so enabled a user to graphically represent a source document to target document mapping, as taught by Vedula in the Abstract. These references were all applicable to the same field of endeavor, i.e., translation of electronic business documents.

**Claims 45-47** are substantially similar to claim 44, and therefore likewise rejected.

**Regarding dependent claim 48:** Shroeder does not explicitly disclose the use of a DTD document model. Vedula, though, discloses the well-known use of schemas to model documents in the Abstract, which notes that other information sources may be used to represent source and target documents. It was merely an obvious variant to one skilled in the art at the time of the invention to have employed a DTD model vice a schema model.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Vedula for the benefit of Shroeder, because to do so

enabled a user to graphically represent a source document to target document mapping, as taught by Vedula in the Abstract. These references were all applicable to the same field of endeavor, i.e., translation of electronic business documents.

**Independent claim 49 states:**

A computer implemented method of automatically generating data in a self-describing markup language format from received EDI data, comprising the steps of:  
*receiving EDI data from a component;*  
*retrieving a self-describing markup language data definition corresponding to a transaction type of received EDI data; and*  
*automatically generating self-describing markup language data based on the received EDI data and the self-describing markup language data definition, prior to said receiving step, generating definitions corresponding to each transaction type from a standard data model of EDI related data,*  
*wherein the step of generating data definitions further comprises, for each transaction, generating definitions for the self-describing markup language, a separate data model to read in data, a separate data model to read out data, and a map component file.*

Shroeder discloses in [0022] the transferring of data between electronic businesses (i.e., trading partners) and the processing of EDI transaction records in [0032], discussing the initial exclusion of certain transaction information, which is reinserted/updated in the XML (i.e., self-describing markup language) file. Shroeder discloses the selection of EDI formats in [0039] – [0040], disclosing the selection from a list of defined formats by the recipient trading partner and subsequent real-time format translation. Shroeder further discloses the mapping of inbound (i.e., received) EDI data and subsequent normalization of that data in paragraphs [0051] – [0052]. Shroeder also discloses the automatic generation of a markup language data in a target EDI

format from reception of a source EDI format document in Fig. 1B, depicting the directory (#24) for storing a source EDI document and the processing blocks (#28 - #34) employed to translate the source into the target EDI and store in an output directory (#36 OutEDI). Shroeder further discloses the creation of a SuperMap in [0051], which discusses the mapping of EDI purchase order version 4010 segments and elements, wherein the mapping exists prior to the reception of incoming data. Shroeder also notes in [0051] that prior art techniques have utilized the creation of individual maps.

However, Shroeder does not explicitly disclose the use of source and target models. Vedula, though, discloses the use of source and target models in col. 3 lines 8-12, discussing the use of source and target models (i.e., schemas) for source and target XML business documents. Vedula further discusses the practice of each company or trading partner creating a document model or XML schema and mapping information transfer between those models in col. 2 lines 25-35.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Vedula for the benefit of Shroeder, because to do so enabled a user to graphically represent a source document to target document mapping, as taught by Vedula in the Abstract. These references were all applicable to the same field of endeavor, i.e., translation of electronic business documents.

**Regarding dependent claim 51:** Shroeder discloses the user selection of a list of standard EDI formats in [0039] – [0040], discussing the real time translation of XML documents into the format selected by the recipient trading partner. Shroeder further discusses transaction sets, such as purchase orders, in [0051], discussing the mapping of all elements and segments. (Refer to Applicant's specification at [0079] or PG PUB No. 20030121001 at [0121]). It is implied that entry of parameters must occur at some point in order for the translation process to take place. Whether such entry is manual or automatic was merely an obvious variant to one skilled in the art at the time of the invention.

**Claims 52-54** are substantially similar to claim 51, and therefore likewise rejected.

**Claims 55-57** are substantially similar to claims 10-12, respectively, and therefore likewise rejected.

**Independent claim 58** is directed to a system for implementing the method of claim 49. As such, claim 58 is substantially similar to claim 49, and therefore similarly rejected. It is further noted that the limitation: "*wherein the receiver receives the self-*

*describing markup language data definition generated by a generator”* is also taught by Fig. 1B of Shroeder. See Fig. 1B #26 and #28.

**Regarding dependent claim 60:** Shroeder discloses the user selection of a list of standard EDI formats in [0039] – [0040], discussing the real time translation of XML documents into the format selected by the recipient trading partner. Shroeder further discusses transaction sets, such as purchase orders, in [0051], discussing the mapping of all elements and segments. (Refer to Applicant’s specification at [0079] or PG PUB No. 20030121001 at [0121]). It is implied that entry of parameters must occur at some point in order for the translation process to take place. Whether such entry is manual or automatic was merely an obvious variant to one skilled in the art at the time of the invention.

**Claims 61-63** are substantially similar to claim 60, and therefore likewise rejected.

**Independent claim 64** is directed to a computer program product for code configured to cause a computer to perform the method steps of claim 49 and/or implement the system of claim 58. As such, claim 64 is substantially similar to claim 49 and 58, as appropriate, and therefore similarly rejected.



**Regarding dependent claim 66:** Shroeder discloses the user selection of a list of standard EDI formats in [0039] – [0040], discussing the real time translation of XML documents into the format selected by the recipient trading partner. Shroeder further discusses transaction sets, such as purchase orders, in [0051], discussing the mapping of all elements and segments. (Refer to Applicant's specification at [0079] or PG PUB No. 20030121001 at [0121]). It is implied that entry of parameters must occur at some point in order for the translation process to take place. Whether such entry is manual or automatic was merely an obvious variant to one skilled in the art at the time of the invention.

**Claims 67-69** are substantially similar to claim 66, and therefore likewise rejected.

**Claims 70-72** are substantially similar to claims 10-12, respectively, and therefore likewise rejected.

### ***Response to Arguments***

12. Applicant's arguments have been fully considered but they are not persuasive.

Applicant's arguments regarding the Shroeder reference are directed toward Shroeder not explicitly teaching the employment of separate source and target data models. The Office has withdrawn the previous rejections, and added the Vedula reference to show the explicit teaching of using both source and target data models.

Since the Webber reference is no longer cited, Applicant's arguments vice Webber are deemed moot.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

#### **US Patent Application Publications**

Delcambre et al	2002/0059566
Kutay et al	2002/0026461
Eck	2002/0129059
Chen et al	2003/0018666

#### **US Patents**

Swamy et al	6,874,141
Li et al	6,763,353
Fong et al	6,678,867
Sundaresan	6,681,223
Ripley	6,742,001
Morgenstern	5,970,490

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Stevens whose telephone number is (571) 272-4102. The examiner can normally be reached on M-F 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R. Herndon can be reached on (571) 272-4136. The current fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Additionally, the main number for Technology Center 2100 is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert Stevens  
Art Unit 2176  
Date: May 2, 2006

rs

  
**WILLIAM BASHORE**  
**PRIMARY EXAMINER**

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In view of the appeal brief filed on 2/8/2006, PROSECUTION IS HEREBY REOPENED. New grounds of rejections are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:



Heather R. Herndon  
Supervisory Patent Examiner  
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